CLAIMS

1. A method for determining a timing offset between a first clock and a second clock at respective first and second points in a communications network, the method comprising:

transmitting a plurality of request signals from the first point in the network to the second point in the network;

receiving at the first point in the network a plurality of reply signals transmitted from the second point in the network, each reply signal corresponding to a respective one of the plurality of request signals;

identifying a first request signal and a corresponding reply signal having a minimum round trip delay time;

determining from the minimum round trip delay time a minimum single leg delay time; and

estimating a timing offset between the clock values of the first clock and the second clock at a first instance, the estimation being based upon the minimum single leg delay time, and a transmission time and a reception time of one of the identified request signal and the corresponding reply signal, as given by the respective clocks at the transmission and reception points of the signal.

2. A method according to claim 1, the method further comprising:

identifying a second request signal and a second corresponding reply signal having another minimum round trip delay time; and

estimating a second timing offset between the clock values of the first clock and the second clock at a second instant, the estimation

being based upon the another minimum single leg delay time, and a transmission time and a reception time of one of the second identified request signal and the second corresponding reply signal, as given by the respective clocks at the transmission and reception points of the signal.

3. A method according to claim 2, the method further comprising:

using the first timing offset and the second timing offset to estimate a third timing offset between the first and second clocks at a third instance.

4. A method according to claim 3, wherein the first and second timing offsets are treated as two terms in an arithmetic progression in order to estimate the third timing offset.

5. A method according to claim 3 or 4, wherein the third timing offset is used to

calculate the clock value at the second clock at the third instance from the clock value at the first clock at the third instance.

6. A method according to claim 3 or 4, wherein the third timing offset is used to calculate a one way delay time of a signal

7. A method according to any preceding claim, wherein each reply signal includes information indicating the clock time at the first clock when the reply signal was transmitted from the first point in the network.

8. A method according to any preceding claim, wherein each reply signal includes information indicating the clock time at the second clock when the request signal corresponding to the reply signal was received at the second point in the network.

9. A method according to any preceding claim wherein each reply signal includes information indicating the clock time at the second clock when the reply signal was sent from the second point in the network.

10. A method according to any preceding claim, wherein each reply signal includes information indicating the clock time at the first clock when the request signal corresponding to the reply signal was sent from the first point in the network.

11. A method according to any preceding claim, wherein a minimum one way delay time is calculated as being half a minimum round trip delay.

12. A method according to any preceding claim, wherein the message and reply signals are packets.

13. A method according to claim 6, where the calculated one way delay time is that of a packet transmitted between the first and second points.

14. A method according to claim 13 wherein the packet is a VOIP packet.

15. A computer programme arranged to perform the method of any preceding claim when executed by a suitably arranged processing device.

16. A processing device programmed with the computer programme claimed in claim 15.